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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Dennis Sunga Fernandez

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SNELL & WILMER L.L.P. (Main)  
400 EAST VAN BUREN  
ONE ARIZONA CENTER  
PHOENIX, AZ 85004-2202

EXAMINER

VO, TUNG T

ART UNIT

PAPER NUMBER

2621

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/823,509	<b>Applicant(s)</b> FERNANDEZ ET AL.	
	<b>Examiner</b> Tung Vo	<b>Art Unit</b> 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11/03/08.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 24-33 and 39-50 is/are pending in the application.
- 4a) Of the above claim(s) 1-23 and 34-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24-33 and 39-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/03/08 has been entered.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 24-27, 31-33, and 40-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hyuga (US 5,818,733) in view of Lackinski et al. (US 5,633,946).

Re claims 24, 31, and 50, Hyuga discloses a system (fig. 13) comprising:

a communicator (21 and 28 of fig. 13) configured to receive first data associated with an object (28 of fig. 13, receiving the first data associated with a person) and second data associated with the object (21 of fig. 13), wherein the first data is received from a fixed detector (27-27n of fig. 13) configured to detect first data, and wherein the second data is received from a mobile target unit (1 of fig. 13) comprising a sensor (GPS of fig. 10, col.5, lines 43-46) configured to detect the second data; and

a processor (2 of fig. 13, note the management unit comprises means for determining the direction and distance to mobile unit (1 of fig. 13) from any of image devices, 27-27n, 27c of fig. 13) configured to process first data (27-27n of fig. 13) and second data (1 of fig. 13, e.g. GPS is included in the mobile unit 1; col.5, lines 39-53) to generate object location information (col. 5, lines 50-55, note the GPS is tracking the location of mobile unit while the image device is capturing or observing the object (e.g. player or person or assistant) associated with the mobile unit as activities of the object).

It is noted that Hyuga does not particularly teach correlation the first data (image) and second data (location information) to determine object location information, and determining at least one of a trajectory or a speed of the object as claimed.

Lackinski teaches information collected and processed can also be used to accurately determine the spatial position of an object seen in the collected visual information. The method includes the high speed collection and correlation of video images and spatial position information (see abstract), so this meets the correlation the first data (image) and second data

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(location information) to determine object location information; and determining at least one of a trajectory or a speed of the object (228 of fig. 12).

Therefore, taking the teachings of Hyuga and Lackinski as a whole, it would have been obvious to one of ordinary skill in the art to modify the teachings of Lackinski into the system of Hyuga to improve the accuracy of location of the object.

Re claim 25, Hyuga further discloses wherein the mobile target unit (1 of fig. 13) comprises a locator unit (fig. 10, GPS) configured to determine a target unit location, the communicator (21 and 28 of fig. 13) configured to receive the target unit location, the processor (2 of fig. 13) configured to determine whether the mobile target unit is within range of the fixed detector (28 of fig. 13, the player is within observation range).

Re claim 26; Hyuga further discloses the object location data comprises at least one of object trajectory information, object physical location information, or object speed information (col. 7, lines 58-col. 8, line16); and the fixed detector (27-27n of fig. 13) provides an image of the object.

Re claim 27, Hyuga further discloses the object is a vehicle (29 of fig. 3); and the mobile target unit (1 of fig. 13, note the mobile unit is inherently carried on the golf cart) is mounted or carried on and/or in the vehicle.

Re claim 32, Hyuga further teaches activating a second fixed camera (27n of fig. 13) in response to the object location information (26 of fig. 13).

Re claim 40, Hyuga further teaches wherein correlating the location based on the first data and the location based on the second data comprises determining compliance with a scheduled object activity whether the locations are consistent (col. 8, lines 33-39).

Re claim 41, Hyuga further teaches wherein correlating the location based on the first data and the location based on the second data comprises determining a movement vector to predict a future location of the object (fig. 10).

Re claim 42, Hyuga further teaches a plurality of detectors (27-27n of fig. 13) each having a corresponding observation range, wherein at least one of the plurality of detectors is selected to observe the object (27 of fig. 1), the detector being selected in response to the processor's correlation of the first data and the second data by determining the location of the object based on the second data (3 of fig. 13).

Re claim 43, Hyuga further teaches wherein the first data comprises at least one of an image of the object or an identifier associated with the object (27 and 28 of fig. 13).

Re claim 44, Hyuga further teaches wherein the first data comprises a plurality of images of the object captured at different times (27 of fig. 13).

Re claims 33 and 45, Hyuga further teaches wherein the second data comprises at least one of an image of the object or an identifier associated with the object (GPS of fig. 10, identifier of the object).

Re claim 46, Hyuga further teaches the camera (27c of fig. 4) mounted on the vehicle (29 of fig. 4) for generating the second data comprises a plurality of images of the object captured at different times.

Re claim 47, Hyuga further teaches wherein the object location information is determined at least in part based on a detector location (41 of fig. 10).

Re claim 48, Hyuga further teaches the location information is determined based on a mobile target unit location (GPS of fig. 10).

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Re claim 49, Hyuga further teaches a movement module (34 of fig. 5) configured to activate a second fixed detector (17 of fig. 5) in response to the object location information, wherein the fixed detector is further from the second fixed detector is than from a third fixed detector (17 of fig. 5).

3. Claims 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hyuga (US 5,818,733) in view of Lackinski et al. (US 5,633,946) as applied to claims 24 and 31, and further in view of Anderson (US 5,684,476).

Re claims 28-29, the combination of Hyuga and Lackinski does not disclose a database configured is coupled to the processor to maintain a plurality of current positions associated with at least one of the current position for a plurality of sensors, a plurality of mobile target units, or a plurality of objects; an accelerometer configured to provide data indicative of movement of the to facilitate generating the object location information trigger object position calculation as claimed.

Anderson teaches a database (35 of fig. 1) configured is coupled to the processor (18 of fig. 1) to maintain a plurality of current positions associated with at least one of the current position for a plurality of sensors (12 and 42 of fig. 1), a plurality of mobile target units, or a plurality of objects; an accelerometer (col. 11, lines 24-25) configured to provide data indicative of movement of the to facilitate generating the object location information trigger object position calculation (fig. 3, calculate new position, e.g. 84 of fig. 3).

Taking the teachings of Hyuga, Lackinski, and Anderson as a whole, it would have been obvious to one of ordinary skill in the art to modify the teachings of Anderson into the combination of Hyuga and Lackinski to improve the accuracy of the object position information.

4. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hyuga (US 5,818,733) in view of Lackinski et al. (US 5,633,946) as applied to claim 24 , and further in view of Woolston (US 5,845,265).

Re claim 30, it is noted that the combination of Hyuga and Lackinski does not particularly teach the object is an identified good; and the detector comprises a camera for



observing the identified good, thereby enabling the sensor and the detector to provide corroborative surveillance of the identified good as claimed.

However, Woolston teaches Internet (col. 14, lines 51-63) and at least one fixed detector (12 of fig. 1) that comprises a camera (12 of fig. 1) for observing such identified good as the object, thereby enabling the sensor (14 of fig. 1) and the detector (12 of fig. 1) to provide surveillance of the identified goods within an observable range (the camera 12 of figure 1 is able to capturing the goods within an observation range) in which the sensor (14 of fig. 1) is mobile relative to the detector; the detector comprises visual-analyzer means (920 of fig. 13, viewing goods) for recognizing adaptively the identified goods using a neural network or simulation program (the image is generated by the camera (12 of fig. 1)) and displaying the image on the display (16 of fig. 1).

Therefore, taking the teachings of Hyuga, Lackinski, and Woolston as a whole, it would have been obvious to one of ordinary skill in the art to incorporate the teachings of Woolston into the combined system of Hyuga and Lackinski for observing goods with its price during inventory. Doing would allow the user to easily set up his or her own warehouse, store, or retailer for buying and selling goods via the Internet.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gross et al. (US 6,218,961) discloses method and system for proximity detection and location determination.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung Vo whose telephone number is 571-272-7340. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tung Vo/

Primary Examiner, Art Unit 2621